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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,010	05/08/2000	FREDRIK WINQUIST	BERGLUNDSP9	4135

7590 12/18/2002
HAYES SOLOWAY HENNESSEY
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EXAMINER

HANDY, DWAYNE K

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 12/18/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/508,010

Applicant(s)
Winquist et al.

Examiner
Dwayne K. Handy

Art Unit
1743



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 19, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39-52 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 39-52 are rejected 35 U.S.C. 103(a) as being unpatentable over Lewandowski et al. (U.S. Pat. No. 4,897,162) in view of Lewis et al. (5, 571,401). Lewandowski teaches a glucose sensing apparatus and methods for operating the device. The basic method involves providing voltage signals at varying levels between a reference electrode (10) and a sensing

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electrode (12) (column 4, also Figure 12). In addition to voltage, Lewandowski also recites using measurements of amplitude, frequency and varying wave shapes in claim 1. Varying waveshapes is also mentioned in column 5, lines 38-55. The use of superimposing (overlapping) pulses and cyclic switching, as well as a pulse frequency of 200 hertz is discussed in column , lines 3-57 and column 7, lines 16-54. Lewandowski specifically recites applying voltage to electrodes and recording current in column 4, lines 8-30. Lewandowski does not teach a plurality of working electrodes coated with different materials, treating the transient by derivative of integration methods, or switching the current or voltage generator between different electrodes.

Lewis et al. (5,571,401) teaches a sensor array for detecting analytes in fluids. Lewis teaches a sensor array which detects fluids based on resistance measurements from an array of electrodes. The measurements are represented in two dimensional form (Figure 3) and even three dimensional form in certain embodiments. Lewis also teaches that these electrodes work
together in an array to provide the measurements (col. 2). Lewis describes measuring temporal response and data manipulation in col. 7, lines 39-57. It would have been obvious to one of ordinary skill in the art to add the teachings of Lewis to the method/device of Lewandowski. The multiple electrodes and subsequent response pattern produced by Lewis allows for a more distinct measurement of an analyte. This would be advantageous when measuring a sample.

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Response to Arguments

4. Applicant's arguments filed 5/10/02 have been fully considered but they are not persuasive. Applicant has argued that the instant method is distinguished over the prior art Lewandowski because the method of Lewandowski is a different technique. The technique differs in that the instant invention, the "whole curve in the transient region must be studied." The Examiner believes that even if this is the case, it is not currently reflected in the claims as written. In claim 39, the method recites providing a fluid to the cell, applying voltage pulses of varying potential across said electrodes, measuring the transient responses and evaluating the responses by multivariate methods. The Examiner believes that Lewandowski provides this. The addition of Lewis provides the multiple working electrodes. The closest recitation of studying the entire curve the Examiner can see would be the use of integration to study the results curve. This is also provided by the addition of Lewis.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (703)-305-0211. The examiner can normally be reached on Monday-Friday from 7:30 to 4:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached on (703)-308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703)-772-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.


Jill Warden
Supervisory Patent Examiner
Technology Center 1700

dkh

December 16, 2002